National Aeronautics and Space Administration
Goddard Space Flight Center

Inside Wallops

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Small Payloads on Shuttle Atlantis

When Space Shuttle Orbiter Atlantis visits the International Space Station during the STS-101 mission this week, it will be carrying two small payloads managed by the Shuttle Small Payloads Projects Office (Code 870): a Space Experiment Module (SEM) and a Complex Autonomous Payload (CAP).

The CAP, a Life Sciences payload sponsored by the NASA Kennedy Space Center, contains 20 experiments provided by schools across the United States. Called Mission to America's Remarkable Students (MARS), the project includes seeds of various types re-flown from SEEDS I and II, and regionally important seed varieties such as lettuce and spinach. In addition,

Florence Patten, Safety Office, performs a radiation safety check on the "Idaho Tubers in Space" SEM.

some schools submitted cellular specimens such as chlorella and e.Coli (from commercial high school scientific supply houses). Each experiment is placed in two-inch diameter tubes in the CAP/Get-Away-Special canister.

SEM-06, which uses a standard 5-cubic foot GAS canister, will have a mixture of 10 passive experiments from the United States and Argentina. The experiments are placed in half-moon shaped SEMs, ten of which are then stacked in the GAS canister. The experiments are:

Idaho Tubers In Space
Shoshone-Bannock High School, Fort Hall, Idaho
Students will study the effect of space on Idaho tubers. The "Spuds in Space" experiment is provided by students from the Fort Hall Indian Reservation.

Seeds/CREPLD II
Purdue University, West Lafayette, Indiana
This experiment will study the effects of the space environment on seeds and on Programmable Logic Devices (PLDs).

Effects of Microgravity on Samples - GADGET
Glenbrook High School, Northbrook, Illinois
Students will determine the effects of the space environment on different types and colors of paint. Secondary experiments provided by other Illinois schools consist of dried shrimp, sand, hair, and feathers.

Yeast In Space
Brock Bridge Elementary, Laurel, Maryland
Students will study the effects of microgravity and temperature on yeast.

Effects of Cosmic Radiation
Benfield Elementary, Severna Park, Maryland
Students will study the effects of space environment (cosmic radiation and microgravity) on various items such as film, seeds, bulbs, yeast, beans, and popcorn.

Effects of Space on Fluids & Seeds
Technical School No. 469, Rosario, Argentina
Students will investigate the effects of the space environment on seeds and liquids such as colored fluids, oil, and water.

GERMINAR-2
National University of Patagonia, Argentina
This experiment will study the effects of the space environment on bee-glue and various seeds.

Seeds and Sea Monkeys in Space
Rosario National University, Argentina
This experiment will study the effects of the space environment on Patagonic seeds (trees), humus, and Artemias Salina (Sea Monkeys).

Cosmic Ray Detectors
Buenos Aires National School/ Rosario National University, Argentina
This experiment will use thermo-luminiscent detectors to study the effect of cosmic rays.

Electronics and Magnetic Recording Devices
Rosario National University/St. Hilda's School, Argentina
Students will study the effects of the space environment on electronics and magnetic chips such as diskettes, CD ROMs, a PC board, and phone cards.

A Triumphant Ten Years in Space for Hubble Telescope

A spectacular morning launch of the Space Shuttle Discovery ten years ago, on April 24, 1990, ushered in a new age of astronomy. The payload in Discovery's cargo bay, NASA's Hubble Space Telescope, was released by the crew into Earth orbit the next day and the Universe hasn't looked the same since.

"This month marks the anniversary of one of the greatest observatories ever flown. We have watched in awe as the Hubble Space Telescope has produced some of the most amazing images about the Universe that surrounds us," said Sen. Barbara A. Mikulski (D-MD). "I am so proud of the NASA team that has worked to keep it running and I'm pleased my support has kept your efforts funded and in business."

Even though initially impaired by a flaw in its main mirror Hubble's position above the distortion of Earth's atmosphere enabled it to begin making major discoveries even before astronauts repaired it in 1993. When corrective optics were installed during that dramatic first servicing mission, the Universe suddenly snapped into sharp focus, and there followed a flood of spectacular images and discoveries which have forever changed how we view the cosmos.

The 12.5-ton Hubble has studied 13,670 objects, has made 271,000 individual observations, and has returned 3.5 terabytes of data, which have been archived as a scientific treasure trove for future generations of astronomers. Its rapid-fire scientific achievements have resulted in over 2,651 scientific papers.improvements, Hubble is a far more capable observatory than when it was launched. Future servicing missions to Hubble are planned for 2001 and 2003.

More information about Hubble can be found on the Internet at: http://hubble.stsci.edu/go/tenth

On the Road.....

Mark Steiner, Spartan Projects Office, recently participated in a Career Day event at Lamont Elementary School in New Carrollton, MD.

Wallops Fire Department personnel with a crash truck participated in the Crisfield Boy Scouts annual disaster training exercise on April 8.

Take Our Daughters to Work Day

The Wallops Federal Women's Program (FWP) will sponsor Take Our Daughters To Work Day® on Thursday, April 27, 2000.

Take Our Daughters To Work Day (TODTWD) was established to help girls stay strong and remain confident while exposing them to options that they might not have previously considered. Most girls exhibit a strong and distinct sense of self-confidence until about age 11. TODWTD focuses on abilities, skills and possibilities rather than appearance and provides positive women role models.

The positive benefits of TODTWD include boosting girls' confidence and self-esteem, exposure to different opportunities in the business world and exposure to non-traditional careers.

Take Our Daughters to Work Day® is a registered trademark of the Ms. Foundation for Women.

For more information, contact Pam Pittman, x1521, or Pat Pruitt, x1245, or see "News" under the Women Of Wallops website for the latest updates: http://www.wff.nasa.gov/~FWP/news/index.html

Vending Machine Price Increase

The vending machine price for Coke and Frutopia will increase from .35 to .50 for 12 oz. cans and from .65 to .85 for 20 oz. bottles. Company reps have started changing the machines and expect to have all the changes done by May 1.

Theme Park Tickets Available

The following tickets are available in the Wallops Exchange, Building E-2. For further information contact Sylvia Bell, x2040.

Busch Gardens

Adult (7 - up)	$29.60
Children (3 - 6)	$24.00

Water Country

Adult (7 - up)	$22.40
Children (3 - 6)	$16.40
3-Day Adult Pass	$55.00

Tickets will be available through the month of September.

Kings Dominion

Discount Coupons ($8 off weekdays, $5.00 off weekends)

Tickets will be arriving soon for NASA Day at Kings Dominion on July 15, 2000. The price includes a free lunch.

Adults (13 - up)	$26.50
Children (3 - 12)	$21.40

Water Rocket Contest ----- May 19, 2000

Build and Launch an Air Pressure Water Rocket

Teams of four (Wallops partners and contractors)
Teams can represent : Your Building (can be by floor)
Contractual Organization,
Facility Organization

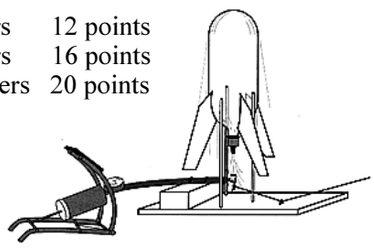
Judging based on the following (100 pts)

Overall looks and aesthetics (20 points)
Points will be made by employee votes from 11 to noon during the Partner's Picnic at the Main Base ball field.

Stability during flight (20 points)

Altitude achievement (up to 20 points)

0-25 meters	10 points	26-35 meters	12 points
36-45 meters	14 points	46-55 meters	16 points
56-65 meters	18 points	over 65 meters	20 points



Overall flight (20 points)

Working recovery system (10 points)

Payload (egg) returned safely (10 points)
****Bonus points for multiple stage rocket** (up to 15 points)

KEY Dates/Locations:
Vote on rockets by Wallops Partner employees May 19, 2000 -- 11 a.m. to noon
Rockets launched from noon to 12:30 p.m., May 19, at the softball field.

Information on constructing a rocket for the contest will be placed in the Cafeteria entrance or can be obtained by calling: Gerry McIntire, x1889 or Tony Goodyear, x1681.

Web site information on water rockets:
http://www.geocities.com/CapeCanaveral/Lab/5413/constr.html
or http://quest.arc.nasa.gov/space/teachers/rockets/act11.html

Sponsored by WEMA Morale Activities Committee

Wallops Open House Logo Contest

The Wallops Flight Facility will hold an Open House on June 24. The event will highlight the many activities by the Wallops' Partners NASA, Navy, U.S. Coast Guard, NOAA and Virginia Space Flight Center.

To begin the activities, the planning committee is holding an Open House Logo Contest. The contest is open to all military, civil service and contractor employees of the Wallops' Partners.

The winning logo will be placed on all Open House publications.

Employees will judge the entries during the Partners' Picnic from 11 a.m. to 1 p.m., Friday, May 19 at the ball field on the Wallops Main Base.

Submit entries to the NASA Public Affairs Office - Bldg. F-6 or the Navy Public Affairs Office, Bldg. R-30.

Deadline: May 12, 2000

For further information on the logo contest, call the NASA PAO at x1579 or the Navy PAO at x1692.

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